

IN THE CLAIMS:

Please amend claims 1-3, 6, 10-13, and 20, and add new claims 21-23 as follows:

1. (Currently Amended) A driving circuit for an electronically switched motor, said driving circuit comprising:

a supply voltage rectifying stage for providing a rectified supply voltage;

first and second control blocks;

first switching means for switching state based on at least one output signal of the first control block;

magnetic means for providing a magnetic flux according to the state of the first switching means;

a plurality of transmission diodes for transmitting an exciting current that flows through the magnetic means;

first energy storing means for storing the exciting current flowing through the plurality of diodes;

an energy return stage for transferring the energy stored in the first energy storing means to the rectifying stage;

second switching means controlled by an output signal of the second control block; ~~and~~

first energetic conversion means coupled to the first energy storing means for receiving the energy stored in the first energy storing means ~~through~~ by means of the second switching means ~~that is controlled by the output of the second control block, so as to provide a current as sinusoidal as possible; and~~

second energetic conversion means coupled between the rectifying stage and the magnetic means, the second energetic conversion means being energetically coupled with the first energetic conversion means.

2. (Currently Amended) ~~The A~~ driving circuit according to claim 1, for an electronically switched motor, said driving circuit comprising:

a supply voltage rectifying stage for providing a rectified supply voltage;

first and second control blocks;

first switching means for switching state based on at least one output signal of the first control block;

magnetic means for providing a magnetic flux according to the state of the first switching means;

a plurality of transmission diodes for transmitting an exciting current that flows through the magnetic means;

first energy storing means for storing the exciting current flowing through the plurality of diodes;

an energy return stage for transferring the energy stored in the first energy storing means to the rectifying stage;

second switching means controlled by an output signal of the second control block; and

energetic conversion means for receiving the energy stored in the first energy storing means through the second switching means that is controlled by the output of the second control block, so as to provide a current as sinusoidal as possible.

wherein the energetic conversion means includes a ~~high-frequency~~ transformer comprising a primary winding and a second winding and having a predetermined spire ratio.

3. (Currently Amended) The driving circuit according to claim 1, wherein the second switching means is in series with at least one ~~part~~ of the first and second energetic conversion means.

4. (Original) The driving circuit according to claim 1, wherein the first switching means and the second switching means are in low side configuration.

5. (Original) The driving circuit according to claim 1, wherein the second control block provides the output signal that controls the second switching means according to a pulse width modulation driving technique.

6. (Currently Amended) ~~The A~~ driving circuit ~~according to claim 1~~, for an electronically switched motor, said driving circuit comprising:

a supply voltage rectifying stage for providing a rectified supply voltage;

first and second control blocks;

first switching means for switching state based on at least one output signal of the first control block;

magnetic means for providing a magnetic flux according to the state of the first switching means;

a plurality of transmission diodes for transmitting an exciting current that flows through the magnetic means;

first energy storing means for storing the exciting current flowing through the plurality of diodes;

an energy return stage for transferring the energy stored in the first energy storing means to the rectifying stage;

second switching means controlled by an output signal of the second control block; and

energetic conversion means for receiving the energy stored in the first energy storing means through the second switching means that is controlled by the output of the second control block, so as to provide a current as sinusoidal as possible,

wherein the second control block provides the output signal that controls the second switching means according to a hysteresis driving technique.

7. (Original) The driving circuit according to claim 1, wherein the first switching means and the second switching means are formed by bipolar transistors each having its emitter electrode connected to ground.

8. (Original) The driving circuit according to claim 1, wherein the first switching means and the second switching means are formed by MOSFET transistors each having its source electrode connected to ground.
9. (Original) The driving circuit according to claim 1, wherein the first switching means and the second switching means are formed by IGBT transistors each having its source electrode connected to ground.
10. (Currently Amended) The driving circuit according to claim 1, wherein the first ~~control block~~ and the second ~~block~~ control blocks are ~~portions of~~ integrated into a single unique control block.

11. (Currently Amended) An electronically switched motor including a driving circuit, said driving circuit comprising:

a supply voltage rectifying stage for providing a rectified supply voltage;

first and second control blocks;

first switching means for switching state based on at least one output signal of the first control block;

magnetic means for providing a magnetic flux according to the state of the first switching means;

a plurality of transmission diodes for transmitting an exciting current that flows through the magnetic means;

first energy storing means for storing the exciting current flowing through the plurality of diodes;

an energy return stage for transferring the energy stored in the first energy storing means to the rectifying stage;

second switching means controlled by an output signal of the second control block; ~~and~~

first energetic conversion means coupled to the first energy storing means for receiving the energy stored in the first energy storing means through by means of the second switching means ~~that is controlled by the output of the second control block, so as to provide a current as sinusoidal as possible; and~~

second energetic conversion means coupled between the rectifying stage and the magnetic means, the second energetic conversion means being energetically coupled with the first energetic conversion means.

12. (Currently Amended) The motor according to claim 11, wherein the first energetic conversion means includes one of a primary winding and a second winding of a high frequency transformer and the second energetic conversion means includes the other of the primary winding and the second winding having a predetermined spire ratio.

13. (Currently Amended) The motor according to claim 11, wherein the second switching means is in series with at least one ~~part~~ of the first and second energetic conversion means.
14. (Original) The motor according to claim 11, wherein the first switching means and the second switching means are in low side configuration.
15. (Original) The motor according to claim 11, wherein the second control block provides the output signal that controls the second switching means according to a pulse width modulation driving technique.
16. (Original) The motor according to claim 11, wherein the second control block provides the output signal that controls the second switching means according to a hysteresis driving technique.
17. (Original) The motor according to claim 11, wherein the first switching means and the second switching means are formed by bipolar transistors each having its emitter electrode connected to ground.
18. (Original) The motor according to claim 11, wherein the first switching means and the second switching means are formed by MOSFET transistors each having its source electrode connected to ground.
19. (Original) The motor according to claim 11, wherein the first switching means and the second switching means are formed by IGBT transistors each having its source electrode connected to ground.
20. (Currently Amended) The motor according to claim 11, wherein the first ~~control block~~ and the second ~~block~~ control blocks are ~~portions of~~ integrated into a single unique control block.

21. (New) The driving circuit according to claim 1, wherein the output signal of the second control block has a frequency such that a substantially sinusoidal current flows through the second energetic conversion means.
22. (New) The driving circuit according to claim 2, wherein the primary winding and the second winding are energetically coupled, and one of the primary winding and the secondary winding is coupled between the rectifying stage and the magnetic means.
23. (New) The motor according to claim 11, wherein the output signal of the second control block has a frequency such that a substantially sinusoidal current flows through the second energetic conversion means.